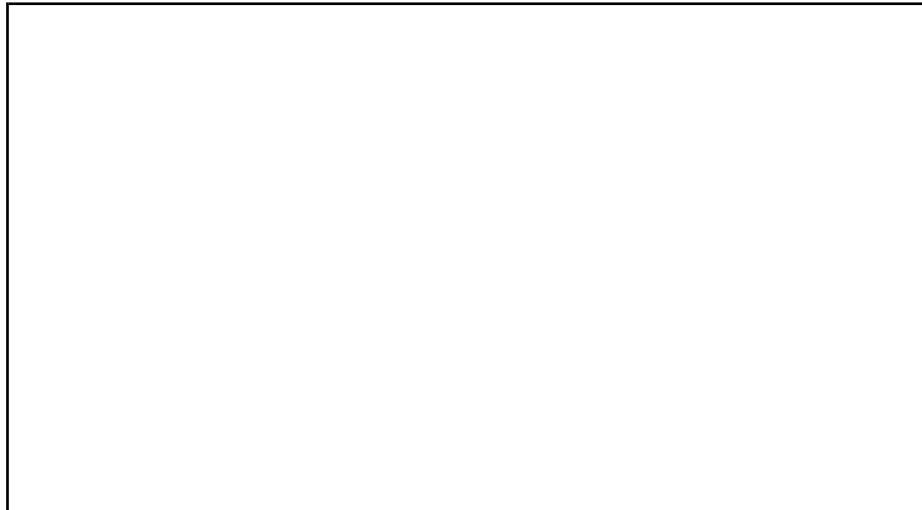




**50HS018, 024, 030, 036, 042, 048 & 060
STANDARD-EFFICIENCY
COMBINATION HEAT PUMP UNITS
W/OPTIONAL ELECTRIC HEAT**

- PERFORMANCE DATA**
- CERTIFIED DIMENSION PRINT**
- CERTIFIED ROOF CURB
DIMENSION PRINT**



Date:	Supersedes:	50HS018, 024, 030, 036, 042, 048 & 060 STANDARD-EFFICIENCY COMBINATION HEAT PUMP UNITS W/OPTIONAL ELECTRIC HEAT	50HS	Rev.:
JOB DATA:		LOCATION:		
BUYER:		BUYER P.O. #	CARRIER #	
UNIT NUMBER:		MODEL NUMBER:		
PERFORMANCE DATA CERTIFIED BY:			DATE:	



ARI 210



ARI 270



ISO 9002 #A2260



DESCRIPTION

50HS units are standard-efficiency, one-piece heat pump units with optional electric heat, pre-wired and pre-charged at the factory.

50HS units are convertible discharge units that can be used for either horizontal or down discharge installations.

FEATURES

Standard one-year warranty.

Five-year Extended Protection Plan for the compressor.

Units are "Rated in accordance with ARI Standard No. 270 and 210/240."

Standard unit as factory assembled is design certified and listed by UL and CSA.

Compressor Time Guard® device is standard.

Low temperature cooling operation standard to 40 F (4 C).

Hermetic compressor with internal linebreak and overload protection, self lubricating. Scroll compressors standard on 4 and 5 ton sizes.

Crankcase heater is standard on 024-042 3-phase units. (Not required on 018, 048 and 060 units.)

Foil-faced cleanable insulation.

Indoor and outdoor coils constructed of aluminum fins mechanically bonded to seamless copper tubes.

Sloped non-corrosive condensate drain pan.

Loss-of-charge switch is standard.

Alternate electrical connections on opposite sides of unit.

Disconnect in accordance with NEC, must be field-supplied and installed.

Multi-speed, direct drive indoor fan motor.

Weatherized cabinets. Heavy duty phosphated zinc-coated pre-painted steel. Capable of withstanding 500-hour salt spray.

24-volt control circuit.

State of the art defrost control board which may be easily configured for defrost cycles of 30, 50 or 90 minutes.

PERFORMANCE DATA

Operating Weight _____ lb (unit); _____ lb (curb)

COOLING

Net Total Capacity _____ Btuh

Net Sensible Capacity _____ Btuh

Compressor Power Input _____ kW @ _____ °F

Outdoor-Air Temperature

Indoor Entering Air db _____ °F wb _____ °F

SEER/EER _____

CFM _____ Ext. Static Pressure _____ in. wg

Indoor Fan Motor _____ Hp _____ Rpm _____ Bhp

HEATING

Power Input to Unit _____ kW

Integrated Capacity _____ Btuh

Indoor Operating Temp _____ °F db

Outdoor-Air Temp _____ °F (Winter Design)

Electric Capacity Required _____ Btuh

Rating @ 70° R.H. _____ kW Heater Selected

_____ Heat/Cool Ratio

COP/HSPF _____ Hi _____ Lo

ELECTRICAL DATA

Power Supply to Unit _____ Volts _____ Phase _____ Hz.

Minimum Circuit Amps _____ Maximum Overcurrent Protection _____

ACCESSORIES AND OPTIONS

FACTORY-INSTALLED OPTIONS

- ☐ Commercial Grade Base Rail
- ☐ Dedicated Downshot/Base Rail

FIELD-INSTALLED ACCESSORIES

- ☐ 30% Open Manual Fresh Air Damper
- ☐ Roof Curb:
 - ☐ 8" Height
 - ☐ 11" Height
 - ☐ 14" Height
- ☐ One-in. Filter Rack

FIELD-INSTALLED ACCESSORIES(cont)

- ☐ Electronic Programmable Thermostat
- ☐ Thermostat and Subbase
- ☐ 0° Low Ambient
- ☐ Controls Upgrade Kit (High- and Low- Pressure Switch)
- ☐ External Condensate Drain
- ☐ Electric Heat Package — 5-20 kW
- ☐ Outdoor Thermostat to Stage Heaters

CERTIFIED DIMENSION PRINT



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REQ'D CLEARANCES FOR SERVICING

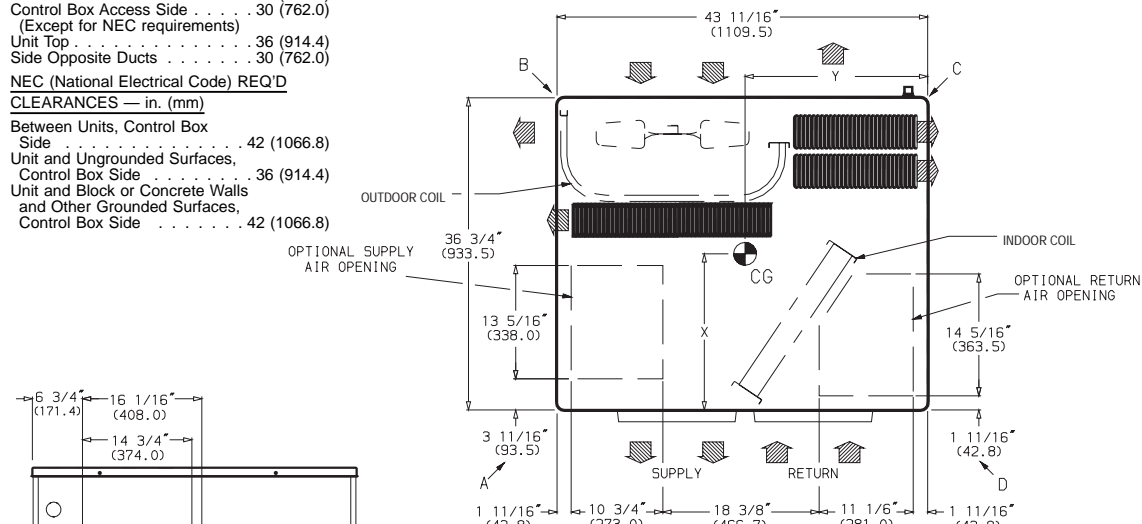
— in. (mm)

Indoor Coil Access Side 30 (762.0)
Control Box Access Side 30 (762.0)
(Except for NEC requirements)
Unit Top 36 (914.4)
Side Opposite Ducts 30 (762.0)

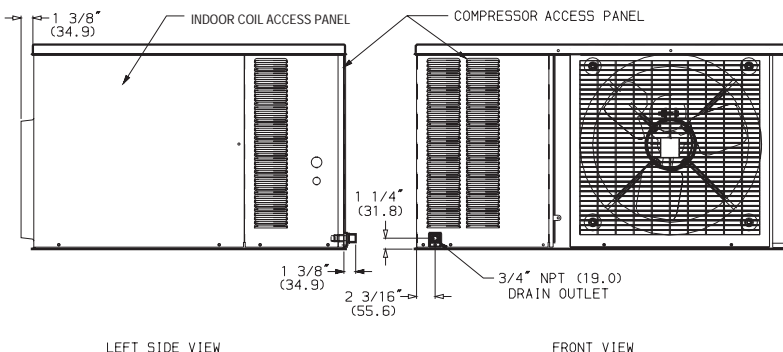
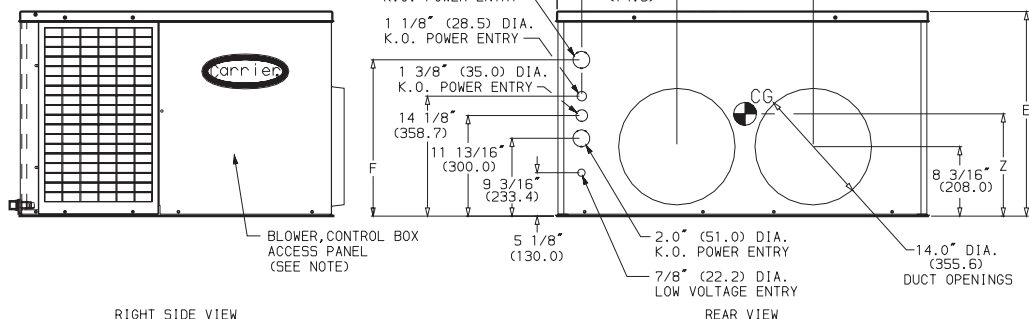
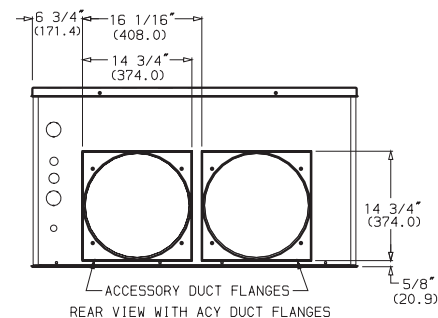
NEC (National Electrical Code) REQ'D

CLEARANCES — in. (mm)

Between Units, Control Box
Side 42 (1066.8)
Unit and Ungrounded Surfaces,
Control Box Side 36 (914.4)
Unit and Block or Concrete Walls
and Other Grounded Surfaces,
Control Box Side 42 (1066.8)



NOTE: CLEARANCES MUST BE MAINTAINED TO PREVENT RECIRCULATION OF AIR FROM
OUTDOOR FAN DISCHARGE.



UNIT 50HS	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
018	208/230-1-60	248	106	66/30	45/20	95/43	42/19
024	208/230-1-60	256	117	68/31	46/21	97/44	45/20
030	208/230-1-60, 208/230-3-50	268	122	66/30	58/26	91/41	53/24
036	208/230-1-60, 208/230-3-60, 460-3-60	288	131	71/32	63/29	96/44	58/26
042	208/230-1-60, 208/230-3-60, 460-3-60	295	134	73/33	65/30	97/44	60/27
024	220-3-50, 400-3-50	261	119	59/27	64/29	91/41	47/21
030	220-3-50, 400-3-50	280	127	73/33	58/26	111/50	38/17
036	220-3-50, 400-3-50	304	138	58/26	88/40	95/43	63/29

UNIT 50HS	UNIT HEIGHT (in./mm)	DIMENSION (in./mm)	CENTER OF GRAVITY (in./mm)		
			X	Y	Z
018	24.12/612.8	18.18/461.8	20.66/525	19.18/487	10.63/270
024	24.12/612.8	18.18/461.8	20.37/517	19.32/491	10.63/270
030	24.12/612.8	18.18/461.8	20.27/515	20.07/510	10.63/270
036	28.12/714.2	22.18/563.4	20.13/511	20.19/513	12.38/314
042	28.12/714.2	22.18/563.4	20.02/509	20.30/516	12.38/314

REQ'D CLEARANCES TO COMBUSTIBLE MAT'L — in. (mm)

Unit Top 0
Duct Side of Unit 0
Side Opposite Ducts 0
Bottom of Unit 0
Vertical Discharge, First 12 in. (304.8) of Supply Duct 1 (25.4)

DATE
08/30/94

SUPPLIES
04/20/94

50HS018 - 50HS042
PACKAGED HEAT PUMPS

50HS000225

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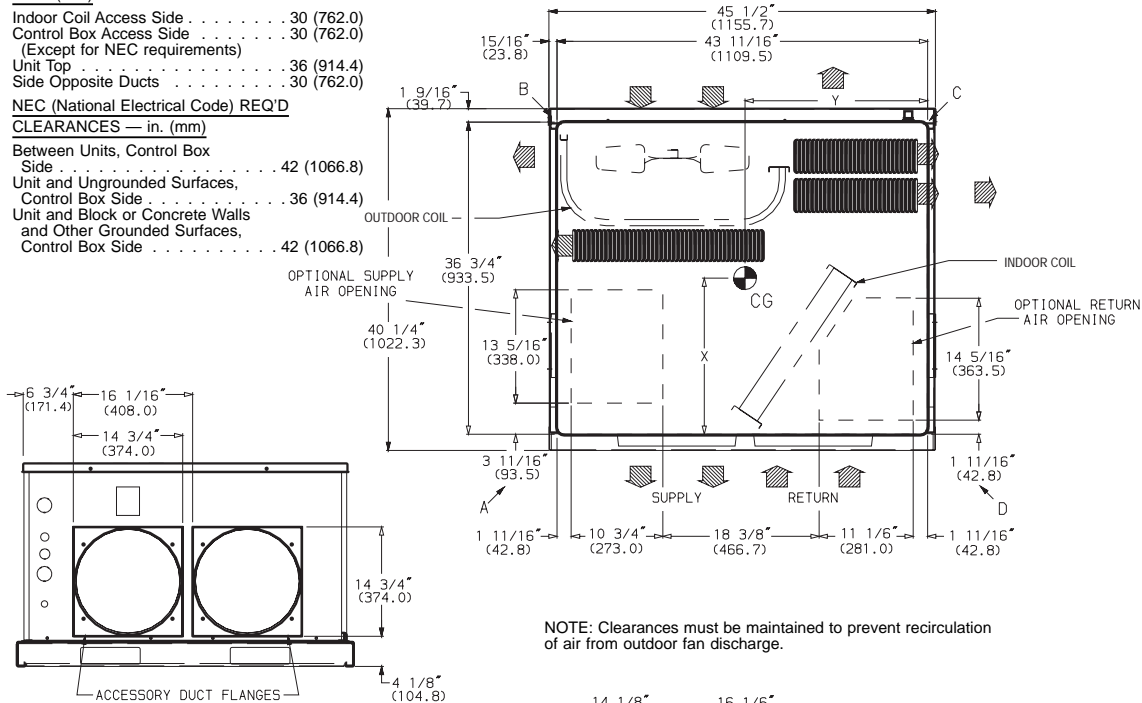
— in. (mm)

Indoor Coil Access Side 30 (762.0)
Control Box Access Side 30 (762.0)
(Except for NEC requirements)
Unit Top 36 (914.4)
Side Opposite Ducts 30 (762.0)

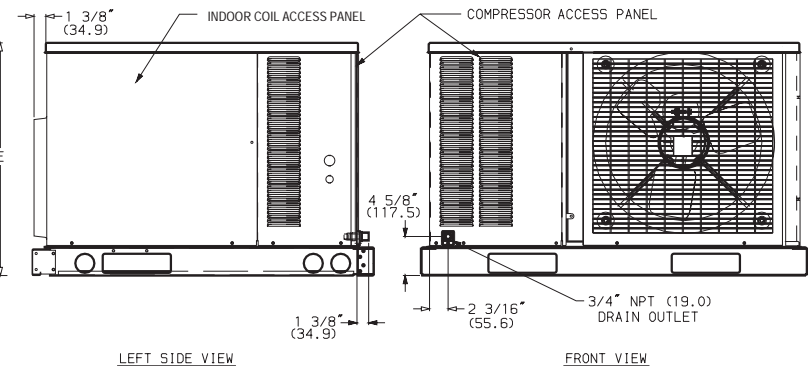
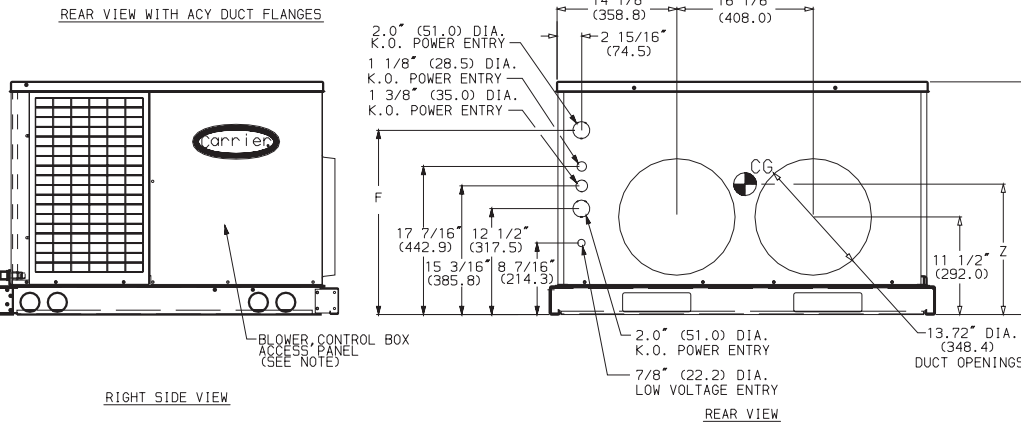
NEC (National Electrical Code) REQ'D

CLEARANCES — in. (mm)

Between Units, Control Box
Side 42 (1066.8)
Unit and Ungrounded Surfaces,
Control Box Side 36 (914.4)
Unit and Block or Concrete Walls
and Other Grounded Surfaces,
Control Box Side 42 (1066.8)



NOTE: Clearances must be maintained to prevent recirculation
of air from outdoor fan discharge.



UNIT 50HS	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
018	208/230-1-60	268	122	70/32	50/23	100/45	48/22
024	208/230-1-60	276	125	73/33	51/23	102/46	50/23
030	208/230-1-60, 208/230-3-60	288	131	71/32	63/29	96/44	58/26
036	208/230-1-60, 208/230-3-60, 460-3-60	308	140	76/35	68/31	101/46	63/29
042	208/230-1-60, 208/230-3-60, 460-3-60	315	143	78/35	70/32	102/46	65/30
024	220-3-50, 400-3-50	281	128	64/29	69/31	96/44	52/24
030	220-3-50, 400-3-50	300	136	78/35	63/29	116/53	43/20
036	220-3-50, 400-3-50	324	147	63/29	93/42	100/45	68/31

UNIT 50HS	UNIT HEIGHT (in./mm)	DIMENSION (in./mm)	CENTER OF GRAVITY (in./mm)		
			X	Y	Z
018	27.43/696.8	21.50/546.1	20.41/518	19.43/493	12.94/328.6
024	27.43/696.8	21.50/546.1	20.21/513	19.49/495	12.94/328.6
030	27.43/696.8	21.50/546.1	20.13/511	20.19/513	12.94/328.6
036	31.43/798.2	25.50/647.7	20.01/508	20.28/515	14.67/372.6
042	31.43/798.2	25.50/647.7	19.91/506	20.38/518	14.67/372.6
024	27.43/696.8	21.50/546.1	21.41/544	20.54/522	11.95/303.6
030	27.43/696.8	21.50/546.1	21.75/553	20.39/518	11.95/303.6
036	31.43/798.2	25.50/647.7	21.72/552	20.89/531	13.53/343.6

REQ'D CLEARANCES TO COMBUSTIBLE MAT'L — in. (mm)

Unit Top 0
Duct Side of Unit 0
Side Opposite Ducts 0
Bottom of Unit 0
Vertical Discharge, First 12 in. (304.8) of Supply Duct 1 (25.4)

DATE
04/20/94

SHEET NO.
1

50HS018 - 50HS042
PACKAGED HEAT PUMPS

50HS00299

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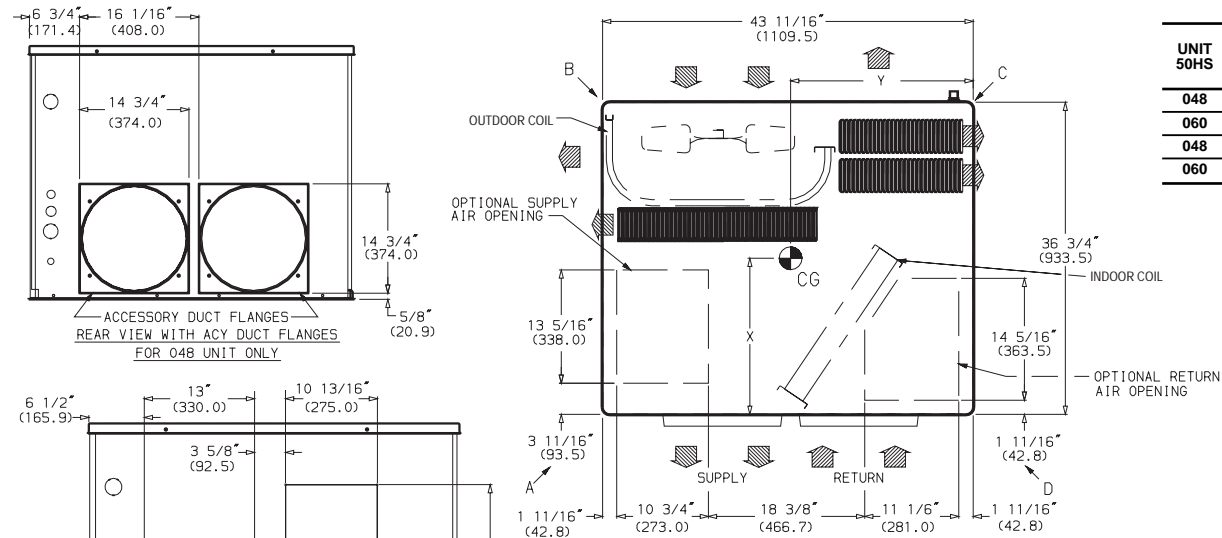
DATE
08/30/94

SHEET NO.
04/20/94

50H5048 - 50H5060
PACKAGED HEAT PUMP

50H500226

REV



NOTE: Clearances must be maintained to prevent recirculation of air from outdoor fan discharge.

UNIT 50HS	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
048	208/230-1-60, 208/230-3-60, 460-3-60	359	163	89/40	81/37	113/51	76/35
060	208/230-1-60, 208/230-3-60, 460-3-60	373	170	92/42	85/39	116/53	80/36
048	220-3-50, 400-3-50	343	156	78/35	90/41	113/51	62/28
060	220-3-50, 400-3-50	350	159	84/38	87/40	100/45	79/36

UNIT 50HS	60 Hz	CENTER OF GRAVITY (in./mm)		
		X	Y	Z
048		19.70/500	20.54/522	15.00/381
060		19.65/499	20.59/523	15.00/381

REQ'D CLEARANCES FOR SERVICING — in. (mm)

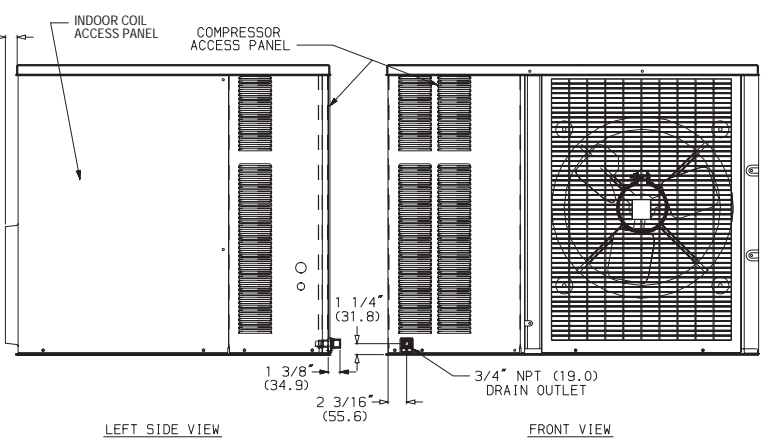
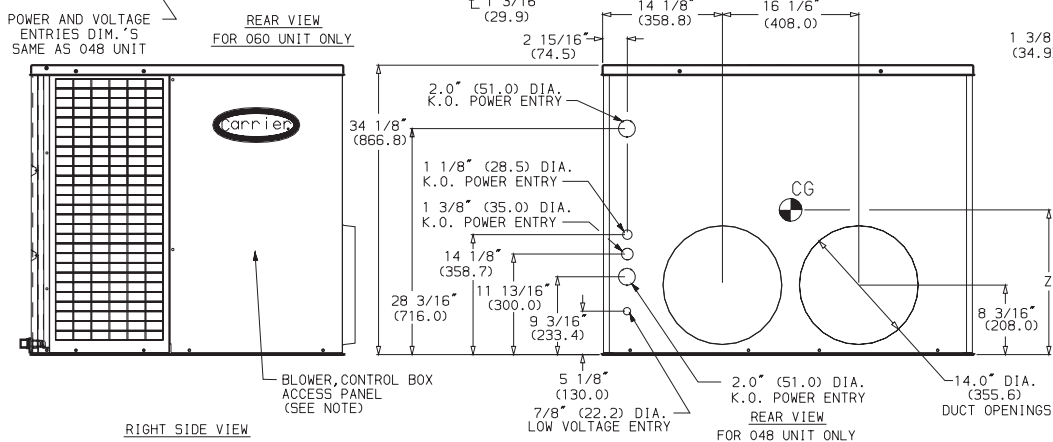
Indoor Coil Access Side 30 (762.0)
Control Box Access Side 30 (762.0)
(Except for NEC requirements)
Unit Top 36 (914.4)
Side Opposite Ducts 30 (762.0)

REQ'D CLEARANCES TO COMBUSTIBLE MAT'L — in. (mm)

Unit Top 0
Duct Side of Unit 0
Side Opposite Ducts 0
Bottom of Unit 0
Vertical Discharge, First 12 in. (304.8) of Supply Duct 1 (25.4)

NEC (National Electrical Code) REQ'D CLEARANCES — in. (mm)

Between Units, Control Box Side 42 (1066.8)
Unit and Ungrounded Surfaces, Control Box Side 36 (914.4)
Unit and Block or Concrete Walls and Other
Grounded Surfaces, Control Box Side 42 (1066.8)



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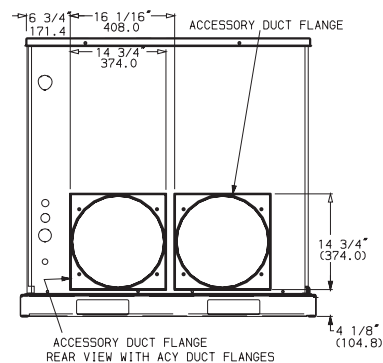


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REQ'D CLEARANCES FOR SERVICING

— in. (mm)

Indoor Coil Access Side	30 (762.0)
Control Box Access Side	30 (762.0)
(Except for NEC requirements)	
Unit Top	36 (914.4)
Side Opposite Ducts	30 (762.0)

REQ'D CLEARANCES TO COMBUSTIBLE

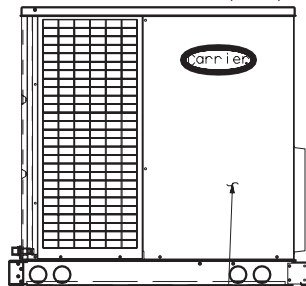
MAT'L — in. (mm)

Unit Top	0
Duct Side of Unit	0
Side Opposite Ducts	0
Bottom of Unit	0
Vertical Discharge, First 12 in. (304.8)	0
of Supply Duct	1 (25.4)

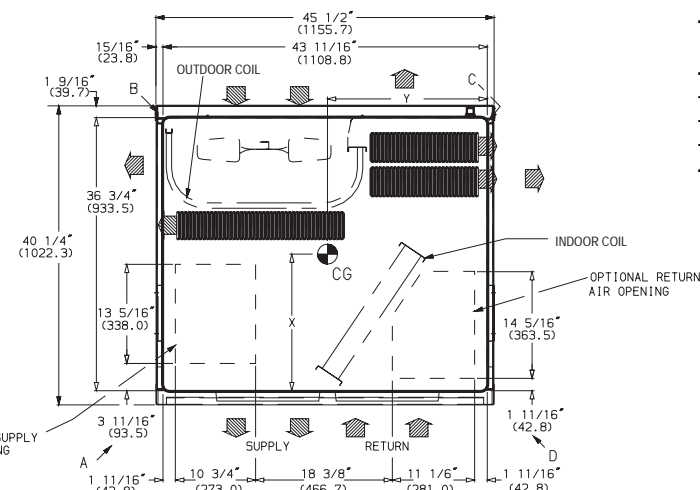
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CLEARANCES — in. (mm)

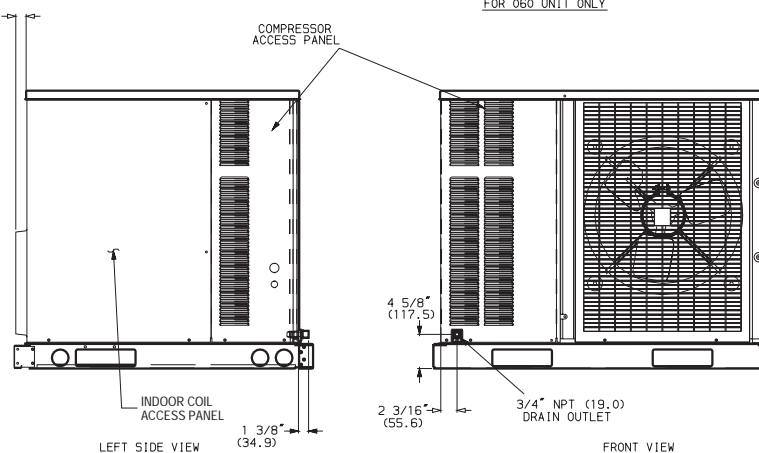
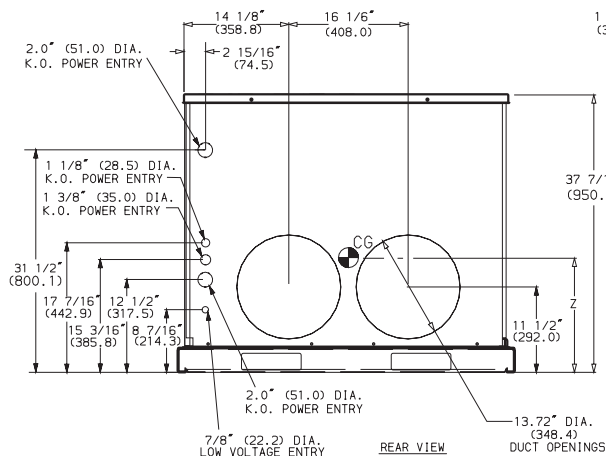
Between Units, Control Box Side	42 (1066.8)
Unit and Ungrounded Surfaces,	
Control Box Side	36 (914.4)
Unit and Block or Concrete Walls	
and Other Grounded Surfaces,	
Control Box Side	42 (1066.8)



BLOWER, CONTROL BOX
ACCESS PANEL
(SEE NOTE)
RIGHT SIDE VIEW

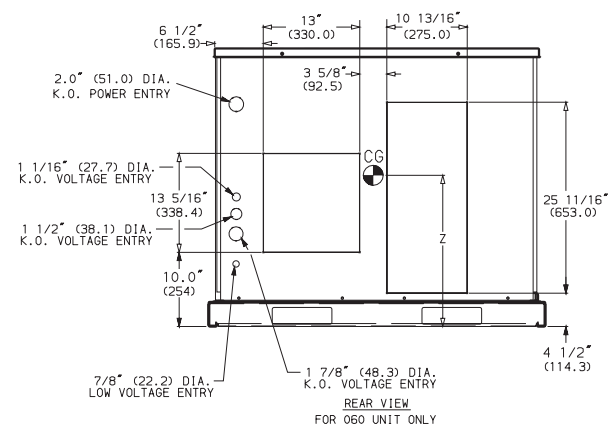


UNIT 50HS		CENTER OF GRAVITY (in./mm)		
		X	Y	Z
048	60 Hz	19.62/498.3	20.61/523.5	17.31/439.7
		19.58/497.3	20.64/524.3	17.31/439.7
060	50 Hz	21.39/543.0	21.28/540.0	17.31/439.7
		19.41/493.0	21.23/539.0	17.31/439.7



UNIT 50HS	ELECTRICAL CHARACTERISTICS	UNIT WEIGHT		CORNER WEIGHT (lb/kg)			
		lb	kg	A	B	C	D
048	208/230-1-60, 208/230-3-60, 460-3-60	379	172	94/43	86/39	118/54	81/37
060	208/230-1-60, 208/230-3-60, 460-3-60	393	179	97/44	90/41	121/55	85/39
048	220-3-50, 400-3-50	363	165	83/38	95/43	118/54	67/30
060	220-3-50, 400-3-50	370	168	89/40	92/42	105/48	84/38

NOTE: Clearances must be maintained to prevent recirculation
of air from outdoor fan discharge.



DATE
09/13/94

SUBMITTER
04/20/94

50HS048 - 50HS060
PACKAGED HEAT PUMP

50HS500300

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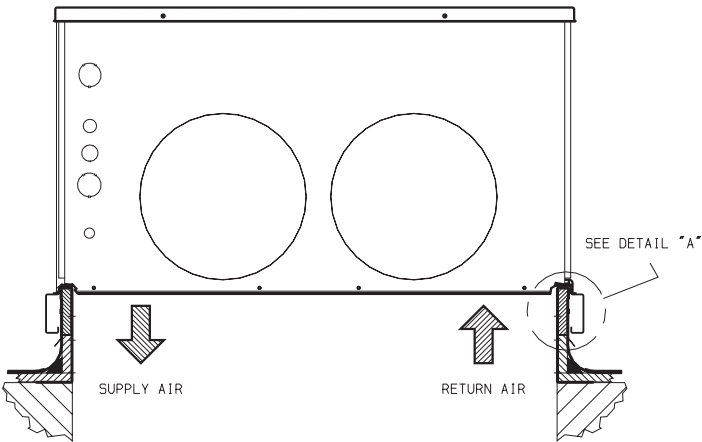
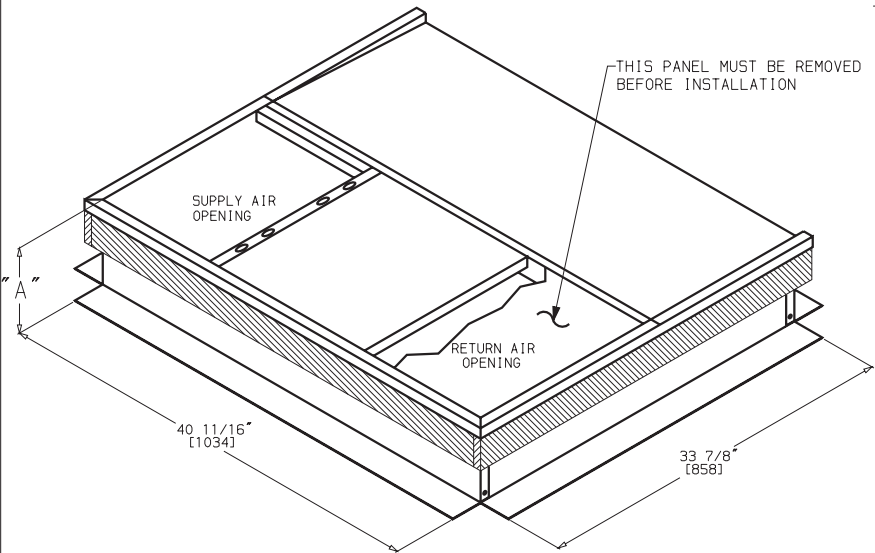
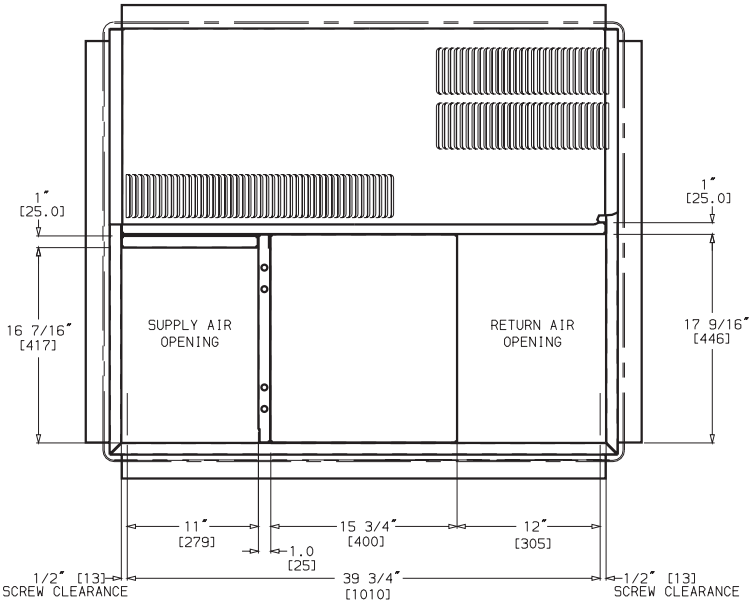
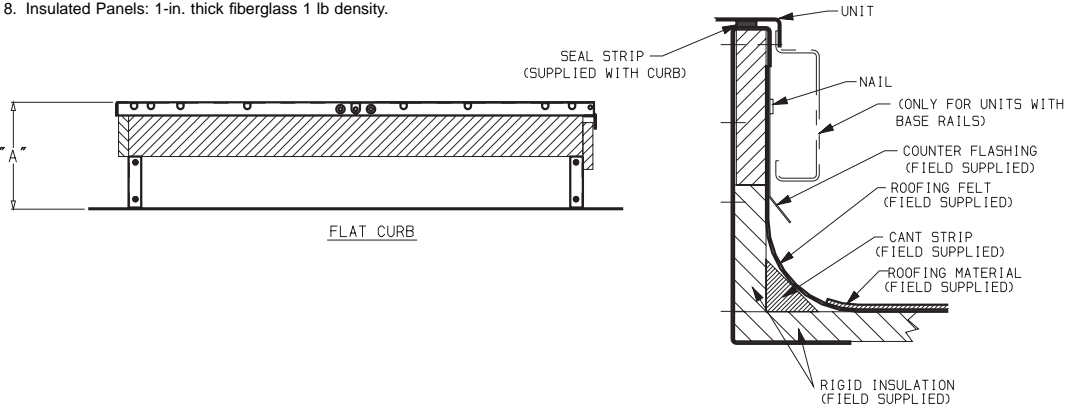
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- NOTES:
1. Roof curb must be set up for unit being installed.
 2. Seal strip must be applied as required for unit being installed.
 3. Dimensions in [] are in millimeters.
 4. Roof curb is made of 16 gage steel.
 5. Attach ductwork to curb (flanges of duct rest on curb).
 6. Service clearance 4 ft on each side.
 7. Direction of airflow.
 8. Insulated Panels: 1-in. thick fiberglass 1 lb density.

PART NUMBER	CURB	"A" (in./mm)
CPRFCURB001A00	FLAT	8 [203]
CPRFCURB002A00		11 [279]
CPRFCURB003A00		14 [356]



DATE 04/18/94
SYNOPSIS 01/26/93
50HS 018-000 ROOFCURB
50SS500552
1
B

